WHAT IS CLAIMED IS:

1. A composition comprising glycoprotein wherein at least one glycoprotein is a glycoprotein having at least one CH2 domain and the composition is substantially free of the glycoprotein having at least one CH2 domain and having an N-linked G1, G0, or G-1 oligosaccharide in its CH2 domain.

2. The composition of claim 1 comprising an antibody glycoprotein.

3. The composition of claim 2 wherein the antibody glycoprotein is a monoclonal antibody.

4. The composition of claim 3 wherein the monoclonal antibody is an IgG.

5. The composition of claim 4 wherein the IgG is human $IgG_1$.

6. The composition of claim 5 wherein the monoclonal antibody is selected from the group consisting of an anti-CD20 specific monoclonal antibody, an anti-HER2 specific monoclonal antibody, and anti-VEGF specific monoclonal antibody, and an anti-IgE specific monoclonal antibody.

7. The composition of claim 6 wherein the monoclonal antibody is an anti-CD20 antibody.

8. The composition of claim 1 comprising an immunoadhesin glycoprotein.

9. The composition of claim 8 wherein the immunoadhesin glycoprotein is a tumor necrosis factor-immunoglobulin G1 chimera.

10. The composition of claim 1 wherein the composition is further substantially free of a glycoprotein having an N-linked G2 oligosaccharide in the CH2 domain.

11. The composition of claim 10 comprising an antibody glycoprotein.

12. The composition of claim 11 wherein the antibody glycoprotein is a monoclonal antibody.

13. The composition of claim 12 wherein the antibody is an IgG.

14. The composition of claim 13 wherein the IgG is human $IgG_1$.

15. The composition of claim 14 wherein the monoclonal antibody is selected from the group consisting of an anti-CD20 specific monoclonal antibody, an anti-HER2 specific monoclonal antibody, and anti-VEGF specific monoclonal antibody, and an anti-IgE specific monoclonal antibody.

16. The composition of claim 15 wherein the monoclonal antibody is an anti-CD20 antibody.

17. The composition of claim 10 wherein the glycoprotein is an immunoadhesin.

18. The composition of claim 17 wherein the immunoadhesin is a tumor necrosis factor-immunoglobulin G1 chimera.

19. The composition of claim 10 wherein the glycoprotein is an antibody-immunoadhesin chimera.

20. The composition of claim 1 wherein the composition is further substantially free of the glycoprotein having an N-linked G-2 oligosaccharide in the CH2 domain.

21. A method of producing the composition of claim 20 comprising the steps of

reacting in an aqueous buffered solution at a temperature of about 25-40° C;

a) a metal salt at a concentration of about 5 mM to about 25 mM;

b) an activated galactose at a concentration of about 5 mM to about 50 mM;

c) a galactosyltransferase at a concentration of about 1 mUnit/ml to about 100 mUnit/ml;

d) a substrate glycoprotein; and

recovering the glycoprotein.

22. The method of claim 21 wherein the metal salt is selected from the group consisting of Mn2++, Ca2++, and Ba2++.

23. The method of claim 22 wherein the activated galactose is uridine diphosphate-galactose (UDP-galactose).

24. The method of claim 23 wherein the galactosyl transferase is a mammalian β1-4, galactosyl transferase.

25. The method of claim 24 wherein the reaction temperature is about 37° C, the metal salt is Mn2++ at a concentration of about 5 mM, the UDP-galactose concentration is about 5mM and the β 1-4 galactosyl transferase concentration is about 1 mUnit/ml.

26. The method of claim 25 wherein the glycoprotein is an antibody.

27. The method of claim 26 wherein the antibody is an IgG.

28. The method of claim 27 wherein the IgG is human $IgG_1$.

29. The method of claim 28 wherein the monoclonal antibody is selected from the group consisting of an anti-CD20 specific monoclonal antibody, an anti-HER2 specific monoclonal antibody, and anti-VEGF specific monoclonal antibody, and an anti-IgE specific monoclonal antibody.

30. The method of claim 29 wherein the glycoprotein is an immunoadhesin.

31. A method for the treatment of a disease state comprising administering to a mammal in need thereof a therapeutically effective dose of the composition of claim 1.

32. A method for the treatment of a disease state comprising administering to a mammal in need thereof a therapeutically effective dose of the composition of claim 10.

33. A method for the treatment of a disease state comprising administering to a mammal in need thereof a

therapeutically effective dose of the composition of claim 6.

34. A method for the treatment of a disease state comprising administering to a mammal in need thereof a therapeutically effective dose of the composition of claim 16.

35. A pharmaceutical composition comprising the composition of claim 1 and a pharmaceutically acceptable carrier.

36. A pharmaceutical composition comprising the composition of claim 10 and a pharmaceutically acceptable carrier.

37. A pharmaceutical composition comprising the composition of claim 6 and a pharmaceutically acceptable carrier.

38. A pharmaceutical composition comprising the composition of claim 16 and a pharmaceutically acceptable carrier.

39. A pharmaceutical composition comprising the composition of claim 7 and a pharmaceutically acceptable carrier.

40. A pharmaceutical composition comprising the composition of claim 17 and a pharmaceutically acceptable carrier.

41. An article of manufacture, comprising:
a container;
a label on said container; and
the composition of claim 1 contained within said container.

42. An article of manufacture, comprising:
a container;

a label on said container; and

the composition of claim 10 contained within said container.

43. The article of claim 41 wherein the label on the container indicates that the composition can be used for the treatment of cancer.

44. The article of claim 42 wherein the label on the container indicates that the composition can be used for the treatment of cancer.